TRAUMA TRIAGE CRITERIA

I. PURPOSE

To establish Trauma Triage Criteria that is consistent with the American College of Surgeons standards that will help identify trauma patients in the field, and based upon their injuries, direct their transport to an appropriate Trauma Center (TC).

II. POLICY

A. Trauma Triage Criteria

Measure vitals and Level of Consciousness (LOC).

A patient shall be transported to the closest Trauma Center (TC) if any one physiologic criteria is present following a traumatic event. Trauma base hospital contact shall be made.

1. Physiologic Indicators:

- **Glasgow Coma Scale (GCS)/**
  - Adult and Pediatric
    - GCS $\leq$ 13
- **Respiratory**
  - Adult and Pediatric
    - RR < 10 or > 29
    - (RR < 20 for infant < 1 year old) or need for ventilatory support
- **Hypotension**
  - Adult
    - BP < 90 mmHG
    - tachycardia
  - Pediatric
    - exhibits inadequate tissue perfusion
    - abnormal vital signs (according to age)

2. Anatomic Indicators:

- **Penetrating injuries to head, neck, torso and extremities proximal to the knee or elbow**
- **Blunt chest trauma resulting in chest wall instability or deformity (e.g., flail chest or ecchymosis)**
- **Two (2) or more proximal long bone fractures (femur, humerus)**
- **Crushed, degloved, mangled or pulseless extremity**
- **Amputation proximal to the wrist or ankle**
- **Pelvic fractures**
- **Open or depressed skull fracture**
- **Paralysis**

A patient shall be transported to the closest TC if any one (1) anatomic criteria is present following a traumatic event. Trauma base hospital contact shall be made.

If physiologic or anatomic criteria is not met, assess mechanism of injury and evidence of high-energy impact.

3. Mechanism of Injury:

- **Falls**
  - Adults: > 20 feet (one story is equal to 10 feet)
  - Pediatric: > 10 feet or two (2) to three (3) times the child's height
- **High-risk auto crash**
  - Intrusion, including roof: > 12 inches occupant site
  - Ejection (partial or complete) from automobile
  - Death in the same passenger compartment
  - Vehicle telemetry data consistent with a high-risk injury

- **Auto versus pedestrian/bicyclist thrown, run over, or with significant (> 20 mph) impact**

- **Motorcycle crash > 20 mph**

If a patient has one or more of the following mechanisms of injury **with** any of the above physiologic or anatomic criteria transport to the closest TC.

If there are no associated physiologic or anatomic criteria meets one or more of the following mechanisms of injury, contact a Trauma base hospital for physician consultation to determine the patient destination. In some cases, a Trauma base hospital may direct a patient a non-trauma receiving hospital.

4. Age and Co-Morbid Factors

Assess special patient or system considerations.

If the patient does not meet any of the above criteria, make Trauma base hospital contact to determine if a TC should be the destination for the following patients:

- **Older adults > 65 years of age**
  - Risk of Injury/death increases after age 65
  - SBP < 110 might represent shock after age 65
  - Low impact mechanism (e.g., ground level falls might result in severe injury

- **Children**
  - Should be triaged preferentially to pediatric capable trauma centers
  - Pediatric patients will be transported to a Pediatric Trauma Center when there is less than a 20 minute difference in transport time to the Pediatric Trauma Center versus the closest TC

- **Anti-coagulants and bleeding disorders**
  - Patients are at high risk for rapid deterioration

- **Burns (Refer to ICEMA Reference #8030 - Burn Criteria Destination Policy)**

  - Without other trauma mechanism triage to closest receiving hospital or burn center.
  - With trauma mechanism, triage to TC. Make Trauma base hospital contact.

- **Pregnancy >20 weeks**

- **EMS Provider Judgement**

C. Exceptions

The patient meets Trauma Triage Criteria, but presents with the following:

- **Unmanageable Airway**:

  - If an adequate airway cannot be maintained with a BVM device and the paramedic (EMT-P) is unable to indicate or if indicated, perform a successful needle cricothyrotomy:
    - Transport to the closest receiving hospital. RSI should be performed in a hospital setting and not on scene
    - Refer to ICEMA Reference #8120 - Continuation of Care for rapid transport to the nearest TC

- **Severe Blunt Force Trauma Arrest**:

  - Refer to ICEMA Reference #12010 - Determination of Death on Scene.
    - Severe blunt force trauma, pulseless, without signs of life and cardiac electrical activity less than 40 bpm)
    - If indicated, pronounce on scene

  - If patient does not meet determination of death criteria, transport to closest receiving hospital.

- **Penetrating Trauma Arrest:**

  - Refer to ICEMA Reference #12010 - Determination of Death on Scene.
    - If the patient does not meet the *"Obvious Death Criteria"* in the ICEMA Reference #12010 - Determination of Death on Scene, contact the Trauma base hospital for determination of death on scene for those patients who suffer a traumatic cardiac arrest in the setting of penetrating trauma with documented

asystole in at least two (2) leads, and no reported vital signs (palpable pulse and/or spontaneous respirations) during the EMS encounter with the patient

- Resuscitation efforts on a penetrating traumatic arrest victim are not to be terminated without Trauma base hospital contact.

- If indicated, transport to the closest receiving hospital.

- **Burn Patients**:

  - Refer to ICEMA Reference #8030 - Burn Criteria and Destination Policy.

  - Burn patients meeting Trauma Triage Criteria, **transport to the closest TC.**

  - Burn patients not meeting Trauma Triage Criteria, **transport to the closest receiving hospital or a Burn Center.**

D. Considerations

- Scene time should be limited to 10 minutes under normal circumstances.

E. Radio Contact

- If not contacted at scene, the receiving TC must be notified as soon as possible in order to activate the trauma team.

- Patients meeting all Trauma Triage Criteria (physiologic, anatomic, mechanism of injury, and/or age and co-morbid factors), a Trauma base hospital shall be contacted in the event of patient refusal of assessment, care and/or transportation.

- In Inyo and Mono Counties, the assigned base hospital should be contacted for consultation and destination.

F. Hospital Trauma Diversion Status

Refer to ICEMA Reference #8060 - San Bernardino County Hospital Diversion Policy.

G. Multi-Casualty Incident

Refer to ICEMA Reference #5050 - Medical Response to a Multi-Casualty Incident Policy.

III. REFERENCES

Number	Name
5050	Medical Response to a Multi-Casualty Incident Policy
8030	Burn Criteria and Destination Policy
8060	San Bernardino County Hospital Diversion Policy
12010	Determination of Death on Scene